

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-12 are pending in the application, with claim 1 being the independent claims. Claims 13-74 are sought to be canceled without prejudice to or disclaimer of the subject matter therein.

Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Examiner Interview

Applicant thanks the Examiner for the interview conducted on January 10, 2008. During the interview, Applicant's representative discussed with the Examiner independent claim 1, U.S. Patent No. 6,404,758 to Wang (hereinafter "Wang") and U.S. Patent No. 5,063,387 to Mower (hereinafter "Mower").

Rejections under 35 U.S.C. § 103

Beginning on page 2 of the Office Action, the Examiner rejects claims 1-4 and 6-12 under 35 U.S.C. § 103(a) as being unpatentable over Wang in view of Mower. Applicants respectfully traverse this rejection.

As suggested by the Examiner during the interview, Applicants have amended claim 1 to recites:

1. A method for down-converting an electromagnetic signal, comprising the steps of:

(1) simultaneously down-converting and performing a matched filtering/correlating operation on a portion of an initially received carrier signal;

(2) accumulating the result of the matched filtering/correlating operation of step (1); and

(3) repeating steps (1) and (2) for additional portions of the carrier signal.

These combinations of features are neither taught nor suggested by Wang and/or Mower.

As described by Wang, only the RF circuit 115 operates on the carrier signal represented by waveline 105. FSC matched filter 130 operates on a baseband signal, which by definition does not include a carrier signal. Accordingly, the FSC matched filter 130 of Wang does not perform "a matched filtering/correlating operation on a portion of an initially received carrier signal" as recited in claim 1 of the present application. Furthermore, Wang neither teaches nor suggests "simultaneously down-converting and performing a matched filtering/correlating operation on a portion of an initially received carrier signal." These deficiencies of Wang are not overcome by Mower. For example, as discussed with the Examiner, Mower does not disclose or recite "simultaneously down-converting and performing a matched filtering/correlating operation on a portion of an initially received carrier signal." Thus, claim 1 is patentable over Wang in view of Mower.

Claims 2-4 and 6-12 depend from independent claim 1 and are patentable over Wang and/or Mower, alone or in combination, for at least the same reasons as claim 1, noted above, and further for the specific features recited in these claims.

Reconsideration and withdrawal of this rejection of claims 1-4 and 6-12 are respectfully requested.

Objection To Claim 5

Applicants thank the Examiner for identifying claim 5 as containing allowable subject matter. For at least the reasons presented above, claim 1 is allowable. Thus, claim 5 is not dependent on an unallowable base claim. Reconsideration and allowance of claim 5 are respectfully requested.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

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Reply to Office Action of September 25, 2007

Sorrells *et al.*
Appl. No. 09/550,644

Prompt and favorable consideration of this Amendment and Reply is respectfully
requested.

Respectfully submitted,

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